

# Program Notice

FGIS-PN-06-09

07/25/06

## NIRT MONITORING PROGRAM - WHEAT AND SOYBEANS

### 1. PURPOSE

This program notice announces that the Grain Inspection Packers and Stockyards Administration (GIPSA) is revising the program for monitoring **wheat and soybean samples** from Near-infrared Transmittance (NIRT) instruments. The revised procedures are applicable to the program effective August 1, 2006.

### 2. BACKGROUND

- a. Wheat. The global artificial neural network (ANN) calibration for NIRT wheat protein, in service since May 2005, has enabled the use of a single calibration for determining protein in all classes of wheat. The performance of the calibration has been demonstrated to be equal to or better than the earlier class-specific calibrations.

Because there is a well-defined relationship between classes when using the ANN wheat protein calibration, monitoring of individual classes has become unnecessary and burdensome. A single set of wheat samples of any class submitted each week is now sufficient to provide the necessary quality assurance for each official NIRT wheat protein testing location.

Locations routinely certifying two or more classes of wheat will benefit by reducing their weekly sample collection effort. GIPSA will benefit by a reduction in sample processing, and more targeted quality assurance.

- b. Soybeans. Semi-annual checktesting of official soybean testing locations was suspended in FY2003, due to budgetary and practical constraints. This has left the program with inadequate quality assurance of official results.

Establishment of a direct monitoring program for official NIRT soybean testing locations will replace two current program elements—checktesting and new-crop sample collection. The monitoring program will provide improved quality assurance versus checktesting. Monitoring samples are also expected to be a superior source of samples for soybean protein and oil calibration review.

### 3. REVISIONS TO THE NIRT MONITORING PROGRAM

#### a. Wheat.

- (1) Each week, official NIRT wheat protein testing locations (GIPSA field offices, official agencies) should submit monitoring samples in accordance with the NIRT Handbook, paragraph 5.3 a., *except*: instead of submitting five samples for each wheat class tested, submit five samples only. The samples should all be the same class, and the sample selection criteria remain the same.

Locations routinely certifying NIRT protein on more than one wheat class should, where practical, rotate weekly submissions among those classes.

- (2) Interpretation of Control Charts. Those GIPSA field offices that provide oversight to official NIRT wheat protein testing locations are responsible for weekly review of the locations' monitoring results. This is done using the QAQC control charts, in accordance with the NIRT Handbook, section 5.6. The change in sample submission procedures will result in a revision to the process of interpreting the QAQC control charts.

The procedure for reviewing monitoring results for an official wheat testing location will remain in accordance with the NIRT Handbook, section 5.6 *except*: generate and review Average Difference and Range Difference charts using class selection "Wheat".

#### b. Soybeans.

- (1) Direct monitoring of NIRT soybean protein and oil will be performed similarly to wheat and barley protein monitoring. All soybean samples processed through the monitoring system will be treated as commodity code 006, "Soybeans". Each week, official NIRT soybean protein/oil testing locations (GIPSA field offices, official agencies) should submit monitoring samples in accordance with the NIRT Handbook, paragraph 5.3 a. *except*: submit five **soybean** samples, 550 to 650 grams each. Where possible include a high protein and a low protein sample, and a high oil and low oil sample. All other sample selection criteria remain the same.

The NIRT monitoring sample submission worksheet will be updated to include soybeans, and distributed to all official testing locations prior to August 1, 2006.

- (2) Interpretation of Control Charts. Those GIPSA field offices which provide oversight to official NIRT testing locations are responsible for weekly review of the locations' monitoring results. This is done using the QAQC control charts, in accordance with the NIRT Handbook, section 5.6. The addition of soybean protein and oil to the NIRT monitoring program will result in a revision to the process of interpreting the QAQC control charts.

The procedure for reviewing NIRT soybean protein and oil monitoring results for an official testing location will remain in accordance with the NIRT Handbook, section 5.6 *except*: generate and review Average Difference and Range Difference charts using class selections "SoyP" and "SoyO" for soybean protein and oil, respectively.

#### **4. FILING INSTRUCTIONS**

File a copy of this program notice with the NIRT Handbook until it is revised to incorporate these changes.

#### **5. QUESTIONS**

Direct any questions concerning the revised NIRT monitoring procedures to Mark Leppert, Quality System and Services Unit (QSS), TSD, (816) 891-0433; or email at [mark.leppert@usda.gov](mailto:mark.leppert@usda.gov)

*/s/ John C. Giler*

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